

Energy Advisory Board Minutes
Meeting 3
September 25, 2001

A meeting of the Energy Advisory Board was called to order by Chairman Conway at 9:00 a.m. on September 25, 2001.

Members present: Ms. Victoria Weber, Consumer Representative; Mr. George Siemens, Utility Industry Representative; Mr. Haydon Timmons, Utility Industry Representative; Mr. Robert Addington, Coal Industry Representative; Mr. Donald Daily, Industrial Consumer Representative; Mr. Bill Daugherty, Oil and Gas Industry Representative; Secretary James Bickford, Natural Resources and Environmental Protection Cabinet; Deputy Secretary Redmon Lair, proxy for Secretary Ron McCloud, Public Protection and Regulation Cabinet; Commissioner J.R. Wilhite, proxy for Secretary Gene Strong, Economic Development Cabinet; Mr. Martin Huelsmann, Chairman, Public Service Commission; Mr. John Davies, Director, Division of Energy; Dr. Ari Geertsema, Director, Kentucky Center for Applied Energy Research; Charles Martin, Western Kentucky USEC Representative and Board Chairman, Jack Conway.

Chairman Conway noted a quorum was present and that the press had been notified regarding the meeting.

Chairman Conway made a motion to approve the minutes of the June 29 and August 9 Board meetings. Motion was approved without objection.

Mr. Thomas Dorman, Executive Director, Public Service Commission, reported on the status on the hiring of an Executive Director. Mr. Dorman stated that interviews with the candidates were close to being complete. Mr. Dorman noted that a candidate would be selected before the next board meeting.

Ms. Samantha Slater, Manager of State and Regional Affairs, Electric Power Supply Association provided a presentation on Power Generation for the 21st Century. Ms. Slater stated that the Electric Power Supply Association (EPSA) tracks all announcements of merchant power plants across the United States.

Ms. Slater also stated that merchant power plants are friendly to the environment and utilize the latest, cleanest technologies. Most new merchant power plants, Ms. Slater stated, use clean burning natural gas as their energy source and utilize combine cycle systems to generate additional energy.

The owners of merchant plants, across the country, seek out long term buyers for their power or sell their output on the open market. Ms. Slater acknowledged that most merchant plants employ a combination of these strategies.

Ms. Slater stated that some merchant plants guarantee a base load of power and by doing so, those plants help large suppliers ensure reliable flow to their customers. Ms. Slater added that other plants operate as part of a regional power pool and that there are others that are peakers, which come on line only when need is greatest. Ms. Slater explained that in its simplest form, a merchant power plant is a generating facility that sells its electrical output on the market.

According to Ms. Slater, merchant power plants have no rate of return and the market risk is borne by the investors and the shareholders. There is absolutely no risk to ratepayers.

Ms. Slater stated that because merchant plants cannot often count on long-term supply contracts, construction and operation demand greater cash reserves than conventional facilities. This forces the merchant plant developers to make detailed projections about the markets they plan to serve, who their customers are going to be and what their needs are going to be.

Ms. Slater noted that companies that want to build merchant power plants can readily find financing and customers which enables them to move more quickly from planning to construction. With customers then assured, merchant plants can negotiate longer-term contracts with their fuel suppliers, which helps insulate the local market from price spikes and supply shortages.

Siting merchant power plants within the state and in the areas of greatest need, Ms. Slater stated, decreases the burden on transmission grids and this decreases the need for additional construction and maintenance. Ms. Slater added that building merchant plants can also decrease a state's dependence on out of state energy suppliers and this, in turn, helps energy markets stabilize and ease the price pressure on customers.

Ms. Slater said she had been asked to speak specifically about moratoriums and power plant siting environments in Tennessee, Georgia, and Florida.

Ms. Slater stated that on August 9, 2001, the Governor of Tennessee issued an Executive Order declaring a moratorium on permits for commercial power plants that generate electricity by burning natural gas or other fossil fuels. In addition, the Governor also formed a task force that will analyze the effects on Tennessee's environment and economy. A report by the task force is expected by the end of the year.

Ms. Slater stated that there is no primary siting authority in Tennessee. Ms. Slater added that the Tennessee Regulatory Authority regulates only one city in the state that receives power from an out of state producer and that the Tennessee Valley Authority (TVA), a federal entity, provides power to every other location in the state.

Ms. Slater stated that although Georgia does not officially have a moratorium, the Environmental Protection Division of the Georgia Department of Natural Resources notified applicants in May that NOx and water concerns prompted the agency to suspend or slow down permitting. Ms. Slater noted that Georgia is currently reviewing 22 applications for power plants and that the Governor has formed a task force that is charged with collecting and analyzing all pertinent data and develop a comprehensive statewide strategy for permitting new plants. Ms. Slater added that Georgia also has no primary siting authority.

Ms. Slater stated that although Florida has no moratorium or slow down, the Florida Electric Power Plant Siting Act of 1973 is the issue at hand. Ms. Slater explained that the Florida Department of Environmental Protection is the primary siting agency in the state. The Act applies to new or expanded steam electric or solar generators of 75 MW or greater, so simple cycle plants are not covered under the Act. The Florida PSC is responsible for determining the need for a facility, Ms. Slater stated, and the siting process takes a minimum of 14 to 15 months.

Ms. Slater stated that she would also like to explain important points about Oregon and Ohio as well. Ms. Slater added that both states have one central agency that is responsible for power plant siting.

Ms. Slater explained that in Oregon, the primary siting agency is the Office of Energy. There is also an Energy Facility Siting Council. No facilities are allowed to build until the council has issued a site certificate for the facility. According to Ms. Slater, the site certificate binds state and local jurisdiction to the council's action and requires them to issue permits, licenses, and certifications for construction and operation of a facility.

Ohio, Ms. Slater stated, has a Power Siting Board. A certificate of environmental compatibility and public need has to be obtained from the Board before construction on major electric generating facility can begin. Ms. Slater added that prior to filing for an application, the applicant must hold a public meeting. Also, the application should contain information regarding the original need for a generating facility, describe the facility's impact and effects on the area that include environmental, ecological, social, agriculture and electric system reliability. The applicant must also provide information on alternative sites.

Mr. Bernie Laskey, Senior Air Quality Scientist, McClarin, Hart and Jones, a consulting engineering firm representing Calla Energy Partners, provided information regarding the proposed merchant power plant in Estill County.

Mr. Laskey described the plant as being designed to operate as a base load duty cycle facility firing 100 percent waste coal. The plant is proposed as a co-generation facility that will produce electrical power and industrial grade steam.

Mr. Laskey stated that the company has not yet entered into contractual negotiations with any potential customers at this time pending resolution and issuance of the air permit, which is under review.

Mr. Laskey added that the Estill County energy project is also a candidate host site for the DOE-funded, clean coal facility demonstration project.

Mr. Laskey stated that Calla Energy has no concerns about the existing capacity of the Kentucky transmission grid, especially in the locale and region where they plan to site the power plant. Mr. Laskey noted that they believe that the project will bolster the power transmission network in the area because it will provide base load plant duty cycle generation support for the transmission system since it will be on-line 95 percent of the time and injecting power from within.

Mr. Laskey stated that the project's associated emissions would achieve what the industry refers to as Best Available Control Technology. Mr. Laskey explained that the proposed project would meet and exceed all stationary source air emission limitations as dictated by rule, regulation or technology demonstration. In addition, Mr. Laskey stated that the Estill County project would be seeking NOx allowances.

Cash Creek Generation was unable to attend due to prior commitments but submitted a written response to the questions of the Board.

Mr. Frank Brayton, Manager of Construction and Operation, Dayton Power & Light (DP&L) Energy stated that the Hardinsburg Electric Generating Station is proposed as a 400MW, peaking plant.

Mr. Brayton stated the specific location was chosen because it is one mile south of a Texas Gas natural gas transmission line that has a compressor station.

Mr. Brayton affirmed that they would sell their capacity and generation to a power marketer, who, in turn, will sell the power on the wholesale power market.

Mr. Brayton added that DP&L Energy are following established procedures in Kentucky for interconnecting into the transmission system and are proposing tying to a Big Rivers substation. Mr. Brayton noted that they expect to pay for system upgrades that are dictated by the addition of this generating facility. Mr. Brayton also stated that DP&L Energy have no specific concerns of the capacity of the transmission grid because they are conducting system impact interconnection and facility studies with Big Rivers. The studies have begun and will dictate how this plant affects the transmission system in the location that is proposed.

Mr. Brayton stated that DP&L Energy has received a final air permit for the facility and they are not foreseeing problems with obtaining NO_x or SO₂ allowances for the facility.

Mr. Chell Stoddard, Manager of Project Development and Mr. Doug Colbeck, Director of Energy, Duke Energy North America, provided information on the proposed Marshall County and Metcalfe County projects.

Mr. Stoddard stated that both projects are 640 MW, peaking plants.

Mr. Colbeck stated that 75 percent of the capacity in Kentucky is over 20 years old and 44 percent is currently 30 years old. For that reason, Duke Energy would like to build plants here in order to fill the gap when the older plants are no longer operational. Mr. Colbeck noted that another reason they chose Kentucky is because the state is well connected regionally from an electric standpoint. The reason for choosing the specific locations in Marshall and Metcalfe counties is that both sites are next to TVA substations, according to Mr. Colbeck.

Mr. Colbeck also stated that the projects will be permitted for 2500 hours of operation and that the plants are not expected to run more than 10 percent to 11 percent of a year.

Mr. Colbeck stated that no customer contacts are in place for the projects.

Mr. Colbeck added that Duke has no concerns for interconnecting into the system and that a study has been completed and TVA identified the upgrades that would be needed. Mr. Colbeck noted that they try to find areas in the transmission system to interconnect that would be low cost and which would be providing a benefit to the system.

Mr. Colbeck stated that both Marshall and Metcalfe county projects have received their final air permits. He also stated that Duke expects emissions to run at about 22 tons of sulfur dioxide per year, about 127 tons of NO_x per year and 212 tons of carbon dioxide per year. Mr. Colbeck confirmed that Duke plans on purchasing NO_x allowances and has concerns that the 5 percent allowance would not be sufficient.

Mr. Rick Bowen, Executive Vice President, Dynegy Generation provided information regarding the three projects of Dynegy in Kentucky.

Mr. Bowen stated that two of the projects are adjacent to one another in Lawrence county so they are commonly referred to as Riverside Generating Plant but for financing purposes, Dynegy has deemed one of the projects as Foothills. The Riverside plant is currently operating and the Foothills project is currently under construction. The third plant is referred to as Bluegrass Generating Plant, which is in Oldham County.

Mr. Bowen stated that both proposed plants are peaking plants that will be running between 12 hours to 1400 hours per year.

Mr. Bowen explained that the reason for locating in Kentucky is because of low cost interconnection and it is less intrusive to citizens near the facilities when the company can build plants close to transmission lines and natural gas lines.

Mr. Bowen stated that Dynegy Marketing and Trade has sold 8 billion kilowatt hours to American Electric Power, East Kentucky Power Cooperative, Cinergy, LG&E, and TVA over the last year and a half and expect that trend to continue.

Mr. Bowen also stated that Dynegy has also had an interconnection study and the results showed that the location of a plant, in the case of Bluegrass, improved services to the region.

Mr. Bowen noted that in addition, there would be no cost other than the physical interconnection. There would not be any cost to the system stability of the transmission facility. Mr. Bowen did acknowledge that in the case of Riverside, however, there was a payment of \$7 million for transmission upgrades.

Mr. Bowen stated that as for emissions, it is unlikely that any of the facilities will ever meet the maximum allowable numbers.

Ms. Barbara Hueter, Director of Governmental Affairs, Enron Corporation provided a presentation on proposed Enron projects.

Ms. Hueter stated that the Marshall County site is a prime location to produce and transmit power because of the amount of state and local support that Enron has received for the project. The site, Ms. Hueter explained, has direct access to interstate natural gas lines and to high voltage transmission lines. Ms. Hueter added that the location has efficient access to other transmission grids from the point of interconnection.

Ms. Hueter stated that the site would be developed as a peaking plant consisting of three simple cycle combustion turbines totaling approximately 300 MW of generating capacity.

Ms. Hueter added that the non-PSD air permit application restricts the hours of operation for the plant to approximately 1000 hours a year, limits the total yearly emissions, and prevents the facility from being classified as a major source of air emissions under the Clean Air Act.

Ms. Hueter also stated that, traditionally, Enron does not have contracts with third party suppliers. The entire output will be sold to Enron Power Marketing which is an affiliate of Enron and is Enron's marketer of power. However, depending on

how Enron structures a deal, Enron could sign a long-term contract with a customer, typically a utility.

Ms. Hueter noted that regarding the interconnection, they continue to negotiate with TVA. Currently, they are studying the necessity of upgrades and costs associated with the upgrades.

Mr. John Tackett of EnviroPower provided information regarding three Kentucky projects.

Mr. Tackett stated that the Kentucky Mountain Power plant would be a 524 MW plant in Knott County using a circulating fluidized combustion and burn waste coal from gob piles.

Mr. Tackett stated that all permits for the plant have been issued and the company is in the final stages of financing. Mr. Tackett also said that an interconnection agreement has been signed with AEP.

In regards to the Kentucky Eastern Power project, Mr. Tackett noted that the plant will be a 550 MW plant located in Martin County and all permits have been applied for. Mr. Tackett also noted that AEP is conducting the system impact study for this plant.

Mr. Tackett stated that the third proposed project, Kentucky Western Power, would be a 550 MW plant located in Marshall County. According to Mr. Tackett, only the air permit application has been made at this time. Mr. Tackett added that the plant is in its initial stages of development and an interconnection request is being prepared with TVA.

Mr. Tackett stated that site availability and proximity to fuel, water and transmission lines determined all plant locations. All EnviroPower plants will be base load generation with a projected 90 percent availability.

Mr. Randy Bird, also with EnviroPower, stated that he has been handling the transmission interconnections for EnviroPower and that the company has paid approximately \$18 million for the Kentucky Mountain Power plant in Hindman to connect to the east at Beaver Creek Substation. They also plan to build another line to the south for 300 MW of capacity.

Mr. Bird added that, in total, EnviroPower is spending about \$30 million to interconnect but feels the company is improving the system by doing so.

Mr. Bird stated that EnviroPower meets all federal emission standards but did not have exact emission information at the meeting.

Ms. Diana Tignor, Vice President of Generation Development for Peabody Energy stated that she was representing Thoroughbred Energy and would provide information on the Thoroughbred Generating project in Muhlenburg County.

Ms. Tignor stated the proposed plant will be located near Central City on 4100 acres that had previously been surface mined and reclaimed by Peabody.

The plant, Ms. Tignor explained, will consist of two 750 MW net pulverized coal units.

During construction, the project will employ close to 1500 people and the number of permanent employees will be around 350 to 400 between the mine and the power plant, according to Ms. Tignor.

Ms. Tignor also stated that the company is currently in the permitting and design stages for the plant. The company expects to begin construction in the spring of 2002.

Ms. Tignor noted that the reason Peabody wants to put the plant in Kentucky is because the company has been operating in the area for over 60 years and has local support. Ms. Tignor added that another reason is that there are sufficient low cost coal reserves in that area to support a plant of this type.

Ms. Tignor anticipates that the plant will be a base load plant with a high number of operating hours. Most likely, the only down time, Ms. Tignor added, would be for maintenance.

Ms. Tignor stated that the company has submitted a bid to a major utility operating in Kentucky for a long-term power sale agreement. However, the company will also look to other utilities in the state.

Ms. Tignor noted that Peabody has applied for transmission access with Big Rivers, American Electric Power and TVA. Big Rivers and AEP were very responsive, according to Ms. Tignor, and are doing evaluations on what upgrades will be needed. Ms. Tignor stated that Peabody has decided to continue with Big Rivers rather than with AEP. Studies with TVA, she said, would not begin until April or May 2002 and results of required upgrades may not be known until April or May 2003.

Ms. Tignor added that north/south transmission capability seems to be very limited and Peabody believes that the upgrades may help the situation.

Ms. Tignor stated that the Peabody plant would be one of the cleanest coal plants in the eastern region of the United States. According to Ms. Tignor, the plant will have selective catalytic reduction for NOx control with emission level

being .09 pounds per million BTU and Peabody is proposing an SO₂ emission level of .167 pounds per million BTU. In addition, Ms. Tignor noted, Peabody will remove at least 98 percent of sulfuric acid missed due to concerns at Mammoth Cave National Park. Ms. Tignor added that although emission levels will be very low, the company will need allowances for SO₂ and NO_x in order to operate the plant.

Being no further business the meeting was adjourned.